

## **U.S. Environmental Protection Agency Science Advisory Board**

Final Minutes of Public Conference Call Meeting June 24, 2004

**Committee:** Contaminated Sites and RCRA Multi-Year Plan Advisory Panel of the U.S. Environmental Protection Agency's Science Advisory Board (SAB). (See attached Roster)

**Date and Time:** June 24, 2004 from 2-5 Eastern Time (See attached Federal Register Notice )

**Location:** By telephone only. Call was run from Science Advisory Board, Cubicle 3610E. 1025 F Street Northwest, Washington D.C.

**Purpose:** The purpose of this call is to continue the overview of the two Multi-Year Plans and to provide additional briefings relating to the two Multi-Year Plans to orient the Panel to the material.

**Materials Available:** Key materials were distributed before the June 10 teleconference. These included the roster, biosketches, Federal Register Notice, charge, the *ORD Multi-Year Planning Guidance Update*, *ORD's Contaminated Sites Multi-Year Research Plan FY2003 Edition*, and *ORD's Resource Conservation and Recovery Act (RCRA) Multi-Year Research Plan: Fiscal Years 2003 to 2010*, May 2004. The following additional materials were distributed before the July 17 conference call: the agenda, draft minutes of the June 10 teleconference, and slides used in presentation. The following materials were distributed between the June 17 call and this one: draft minutes of the June 17 call, an agenda for this call, slides to be used in today's presentation, and a draft agenda for the June 7-9 meeting.

**Attendees:** Kathleen White of the SAB Staff Office was present as were panelists Clark, Dellinger, Dzombak, Hughes, Kim, Lifset, McFarland, Shaw, Smith, and Thompson. EPA's Trish Erickson, ORD/NRMRL, Candida West, ORD/RTP, David Carson ORD/NRMRL, Lynn Papa ORD/NRMRL, Dermont Bouchard ORD/Athens, Mitch Lassat ORD/NCER, Deb Gonima ORD/ORMA, and Leah Evison of OSWER were present. A Panel roster are attached to the minutes. No members of the public identified themselves as being on the call.

### **Summary**

The meeting went largely according to the agenda (attached) with some slight differences in times.

1. DFO will send 3MRA report (Cover letter and Executive Summary Sent)
2. EPA will provide additional materials on resource conservation and beneficial use in response to questions Smith raised about whether RCRA encourages getting materials into use if it can be done in a safe manner.
3. EPA will provide additional materials on gasification in response to Dellinger's question.

4. EPA will provide budget information at the theme level. The Panel will need information on leveraging and resources if they discuss priorities.
5. EPA will address how it retains flexibility to address emerging issues when the budget is tight.
6. The DFO will contact each leader to find out what his or her plan is for making progress.
7. In drafting the preliminary responses to the charge questions, panelists will make their comments by plan, to be combined later.
8. The Panel would like information on the delisting process and how the RCRA MYP might facilitate delisting.
9. The Panel renewed its request for the Pollution Prevention Multi-Year Plan.
10. ORD will provide a short briefing on the EPA Science Inventory (SI) because AA/ORD Paul Gilman spoke to the Board on the SI's role in capturing the effectiveness and use of science at the June 3-4 Board meeting and it may be important.
11. Because panelists are interested in understanding the interfaces between these two plans and others, especially the Pollution Prevention Plan (and its sequel) a short briefing on the sequel to the P2 MYP and, perhaps, a briefing from Alan Hecht on Sustainability would be helpful. The sustainability research strategy is the umbrella to which various MYPs will contribute.
12. The DFO will send out a note to the Panel explaining why it is important for people to stay and participate in the outbriefing.
13. To the extent the Panel has additional briefings on topics such as the SI and pollution prevention, they should not be on the first day because it would be better to use the Panel's energies on writing and have the additional briefings on the afternoon of the second day.
14. The Panel is willing even prefers to have working lunches, but they need a slot somewhere where they can return phone calls.

The following summary provides more detail on these items.

At 2:00, SAB DFO Kathleen White opened the meeting. She called the roll of the Panel, expected Agency staff, and the public. Since most attendees had heard the following points on the two previous calls and all had access to them in the minutes of those calls, she asked if anyone objected to her not repeating them. No one did. The points are included in these minutes for the benefit of those without access to the previous calls or minutes.

1. Welcome to the conference call, which is the third in a series of face-to-face and conference call meetings at which a specially formed panel of the EPA Science Advisory Board will review the Contaminated Sites and

RCRA Multi-Year Plans. The first two conference calls were June 10 and 17. There will be a face-to-face meeting July 7-9, and, if necessary, another conference call August 5 to wrap up the Panel's report.

2. After the Panel approves its report, it will be forwarded to a Quality Review Committee (QRC) of the Board which will consider it at a public conference call. The QRC may recommend it for approval, recommend it for approval with minor changes, or return it for further work. Once the QRC has recommended approval, the report will be considered by the Board. The Board, in turn, may approve the report, approve it pending certain minor changes, or return it to the Panel. Once approved by the Board, the report will be transmitted to the Administrator and the Agency will respond to it in writing.
3. The activities of the Science Advisory Board are governed by the Federal Advisory Committee Act, other government regulations (such as those on conflict of interest) and SAB policies.
4. In accordance with *Reorganization of the EPA Science Advisory Board (SAB), A Report of the EPA Science Advisory Board Staff Office (EPA-SAB-04-001)* and *Implementation Plan for the New Structural Organization of the EPA Science Advisory Board (SAB), A Report of the EPA Science Advisory Board Staff Office (EPA-SAB-04-002)* especially section 5.2 item (b) of the latter, this panel was formed from a standing committee of the Board the Environmental Engineering Committee, supplemented with additional experts from other SAB committees and other EPA FACA Committees. The additional experts are Dr. Thompson from the SAB's Ecological Processes and Effects Committee and Dr. Clark from the Board of Scientific Counselors. As stated in the Federal Register notice, the roster and biosketches were published at SAB's website and an opportunity was provided for comment. None was received.
5. The SAB website ([www.epa.gov/sab](http://www.epa.gov/sab)) contains materials about panel formation and about this advisory.
6. All panelists have completed a course on government ethics prepared especially for Special Government Employees, like themselves.
7. All materials available to the Panel will be available to the public. Individuals wishing to be on the DFO's distribution list for materials relating to this review should send an email to that effect to the DFO ([white.kathleen@epa.gov](mailto:white.kathleen@epa.gov)) who will add them to her list.
8. Public comment is accepted at SAB meetings. Written public comments are encouraged, but opportunities for brief oral comments may also be scheduled in advance. No one from the public has requested time to comment on this conference call.
9. All consensus drafts, and possibly earlier drafts, will be available to the agency and the public.
10. Because this is a conference call, people should use the mute button unless they are speaking and identify themselves before they do speak.

Dr. McFarland reviewed the results of the June 17 meeting, especially the issues where the Panel had requested additional information and assignments given to individual members, as shown in the following table.

Assignments of Panelists to Charge Questions										
Charge Question ->	1					2			3	
Person	a	b	c	d	e	a	b	c	a	b
Clark							x		L	
Crittenden		L			x			x		
Dellinger				x			x			
Dzombak			L		x					x
Eighmy			x			L				
Hughes	x							L		
Kim 5/28	x				L				x	
Koshland			x						x	
Lifset	-							-		
McFarland										
Powers		x		L						
Rood		x								x
Shaw						x				L
Smith	L							x		
Thompson				x		x	L			

McFarland then spoke to the SAB's Quality Review Committee process. In reviewing the report, the QRC is asked to consider whether:

1. the original charge questions to the SAB have been adequately addressed by the draft report;
2. there are any technical errors or omissions in the report or issues that are inadequately dealt with;
3. the Panel's report is clear and logical; and
4. any conclusions drawn or recommendations provided are supported by the body of the Panel's report.

He recommended that the Panel keep those questions in mind as they developed responses to the charge questions. Lifset asked who is on the QRC and the DFO responded that the QRC will be chaired by former EEC Chair, Domenico Grasso, who is now Vice Chair of the Board. The other members will come from the Board.

Dzombak asked if there had been confirmation among the writing leaders that 9 a.m. July 6 will work. McFarland asked to defer this discussion until later in the afternoon.

At 2:20 Trish Erickson noted that OSW's Jan Young and Jeff Yurk of Region 6 were key program and regional contacts for developing this plan. Neither was able to be on today's call, but plan to be at the face-to-face meeting. Also, she corrected the agenda. Long-Term Goal 1 should read Multi-Media Decision-Making and Long-Term Goal 2 should read Waste Management. This is simplified from the 2001 MYP which had three goals (slide 2). She referred to her slides and the RCRA MYP, especially figure 1 (logic model, on page 8). She spoke of the Resource Conservation Challenge (RCC), briefly described as putting Conservation back into RCRA. The OSWER website describes programmatic and other activities relating the RCC. The 2003 MYP attempted to come more in line with the RCC. This brings out the issue of balancing core and emerging research needs. Slide 6 looks at developments which influenced development of the 2003 MYP (including the Pollution Prevention/New Technology MYP which will become the Science and Technology for Sustainability MYP) and those that will influence the 2005 merger of the Contaminated Sites and RCRA MYPs.

The purpose of Long-Term Goal 1 on multi-media decision making is to support scientifically defensible and consistent decision-making for RCRA waste management and corrective action by providing a tested multimedia modeling system, technical reports, and technical support. The themes are resource conservation (electronics waste, beneficial use, waste minimization priority chemicals), corrective action, and multi-media modeling (science advancement, technology integration, quality assurance, applications)

Multi-media modeling is the biggest component within Long-Term Goal 1. Figure 3 of the MYP is the flow diagram for this component. Most (if not all) of this is the Multi-Media, Multi-Pathway, Multi-Receptor Modeling System (3MRA). Dellinger noted that he does not see multi-pollutant and asked whether the model considered one pollutant at a time. Dermond Bouchard said that was correct. Candida West said EPA hopes to go there, later, making a 4MRA model. The SAB reviewed the 3MRA model at various levels. The last conference call was March 18. The report is awaiting attention of the QRC. If the report is final in the fall, it will be good timing for the MYP revisions. Tim Thompson asked for the draft 3MRA review.

Resource conservation is a relatively new area of research (slide 14). Electronics looked good because of volume, exposure, and toxicity. Dellinger confirmed that HAH meant halogenated aromatic hydrocarbons. John Smith asked a question about getting beneficial use out of RCRA waste simply being identified as a RCRA waste presents practical problems will this work help? Erickson responded that RCRA covers both hazardous and non-hazardous waste. The program's stated intention is to reduce materials used, reduce use of virgin materials, and not throw things away. She infers that, in principle, that avenue should be open. The philosophy is to get materials into use if it can be done in a safe manner. Smith would like more on this. Dellinger asked whether gasification fits here; Dermont Bouchard said it does not. Erickson said that LTG 2 deals with combustion. OSW has listed about 30 priority chemicals to be given priorities for avoidance or alternatives to reduce risk. ORD thinks that, through risk assessment modeling, it can identify chemicals where one could get some bang for the buck.

Page 18 of the MYP and slide 15 address RCRA Corrective Action. The meat of the program is doing work for regions reviewing a document, doing a preliminary

assessment of potential remedies, statistics for a sampling plan, etc. Because the technical issues are similar, knowledge gained in RCRA Corrective Action, Superfund, and Brownfields is shared among the EPA centers identified in Appendix E of the Contaminated Sites Multi-year Plan. These centers are staffed by a small number of dedicated people who have the ability to reach out to other experts as needed.

The purpose of Long Term Goal 2: Waste Management (slide 18, page 27 of MYP) is to improve waste management for industrial and municipal wastes to enhance sustainability by providing technical reports and technical support. Themes under this goal are landfill bioreactors, conventional landfills, leaching and waste treatment. Landfill capacity can be renewed if you can accelerate biodegradation and reduce risks (slide 20 and MYP Figure 4a). Containment is a major issue in research on conventional landfills

Erickson described how work under the two plans is coordinated to create a cohesive and complete research program on waste containment. Jim Clark confirmed they should add up the research and resources in both MYPs to get the total picture on containment.

The second component of waste management (page 32, figure 4b) is combustion. The focus of the limited resources on high temperature facilities is emissions rather than waste feed. This is a small program which is supplemented by other research areas such as contaminated sites (see slide 20).

At 3:15 Mike McFarland invited questions from the Panel.

Dzombak enquired about slide 3 which shows \$2.6 million for goals 1 and 2 while elsewhere there is talk about \$10 million. Erickson responded that the \$10 includes fully burdened labor for all the people (40FTEs). The \$2.6 million is extramural dollars only. The rest of the \$10 has to pay for FTE, travel, equipment, administration all the things that are determined by formula. Dzombak asked if the \$2.6 was spent mostly at EPA facilities. Deb Gonima of ORMA responded this is money is directed and driven by the ORD researchers if they cannot do it hands on with their equipment and their time. If the \$2.6 million was not appropriated, the scope of the research program would have to change because, without the ability to travel or purchase analytical services you would have to do more bench work and less field work, for example. The importance of extramural funds to the research areas varies. If it dropped significantly, EPA would have to ask whether it could still be effective in each area. Dellinger said that, when research funds are cut off, the labs are encouraged to sell their skills to other organizations, like DOD or DOE. He thinks this dilutes their attention.

Dellinger had questions about gasification which is mentioned in many places in the MYP. He thinks it was initiated by industry. There is concern that some of these processes are less efficient than incineration. He thinks there needs to be a thorough evaluation of gasification how widely it will be used, how many types (and which) wastes might be used, and how it will be regulated by EPA. He has yet to hear a detailed plan or schedule to see if gasification works as promised. This is not Erickson's field, she heard a significant presentation on it last summer. She would like to gather that information for them to forward to DFO for Panel before the face-to-face meeting.

Thompson observed there are a lot of possibilities competing for resources across the program. Dzombak agreed that there are a lot of possibilities chasing

dollars. SAB can think of the topics, add to them, change nuances, but if there's very little money to apply then the question is really priorities. Dellinger thinks this relates to Dzombak's question about what the budget includes. He referenced slide 3. Erickson said that the bulk of the 40 FTE referenced are technical people. Byung Kim asked how much it cost to hire an FTE; there was a discussion of post docs. The DFO expressed some unease over getting too deeply into the budget because private sector and federal budgets are structured very differently and the resulting confusion can cause a panel to lose a full day. Nevertheless, there is something to be said for knowing whether the budget passes the straight face test. There was general agreement that budget figures at the theme level would be useful and that the Panel will not comment on what the budget should be.

Dellinger asked about references to Homeland Security and emergency response in the MYP (page 5). Erickson said EPA has a new Homeland Security Research Center. The Center's resources are in Goal 3, but not in either of these MYPS (CS & RCRA). Dellinger also asked about the NIEHS programs and how they relate to the CS & RCRA Programs. Erickson responded with some of the details about how EPA and NIEHS are improving their coordination.

At 3:40, McFarland reminded the Panel they are to stay focused on content rather than process. If resource information is provided by theme, it is inevitable that the Panel will ask how EPA set those priorities. This will get into customers needs and into the scientific rationale for those decisions. Clark seconded McFarland, and mentioned the closing of a combustion center. Lynn Papa of NCEA said that a combination of funding shortages and a reduced use of the center by outsiders led to the closing of this center. Thompson has the lead for addressing this issue and does not feel he is in a good position to do so with the little data now available.

At 3:45 McFarland returned to the discussion of assignments. He noted that all panelists are encouraged to address any and all charge questions. The assignments are not intended to limit contributions, but to provide some structure. He referenced the draft agenda for the July 7-9 meeting, especially an item in the afternoon where the leads will give brief presentations on their non-consensus preliminary responses. He wanted to know if there were concerns or questions about the writing assignments. None were raised, so we assume things will progress according to plan. The DFO was charged with contacting each leader to see what their plan is. Dellinger thinks it's pretty straight forward—people send their comments to the leads, who make them intelligible and forward them to McFarland and DFO.

Thompson asked whether they were supposed to respond separately for each plan or jointly. The DFO hadn't given this much thought, but had assumed it would be integrated. She asked for Panel discussion. Dzombak thinks it would be easier to discuss them separately at this point. The documents are structured differently and resources (CS has a priority framework and RCRA a topical framework) are provided by plan, so separate responses seem like an easier place to start. Erickson said the charge is prospective to give EPA advice on how to go forward as they merge the plans. She anticipates one answer, but would expect references to one or both plans as illustrations. The form of the advice may not be important if the content is there. Dzombak asked Erickson whether she would expect the new MYP to follow the CS priority framework. She said that was her inclination, but the choice belongs to a group, not her alone. The new national program director might, for example, have different ideas. Dzombak thinks that, if the combined document is headed towards a priority framework, it would help the Panel provide a single response. After hearing this Dzombak proposed a single response, even on this draft. Thompson still thinks they

should start separate. He thinks this will help the Panel see what is good and what needs to go. Smith concurs with Thompson. The Panel can cut and paste into a single response later. Dzombak was persuaded. McFarland summarized that, at this early stage, Panelists will focus their comments by plan, to be combined later. The Panel will identify for the Agency what will facilitate a combined plan later.

At 4:00 McFarland asked what additional information and/or briefings the panelists would like for the July 7-9 face-to-face meeting. In addition to the issues identified on the June 17 call, he heard that the Panel would like information on the delisting process and how the RCRA MYP might facilitate delisting and information on budget at the theme level and how priorities were set.

Kim would like the Pollution Prevention Multi-Year Plan; Erickson is having this converted to PDF.

The Panel would like the Science and Technology for Multi-Year Plan; however, it hasn't been written yet so that is not possible.

Dellinger would like the draft 3MRA report (to be forwarded by DFO) and information on waste gasification.

McFarland asked whether there were additional presentations needed. Dzombak spoke about the nature of leveraging. If they discuss priorities, leveraging and resources will be necessary.

McFarland would like the Panel to consider a briefing on the EPA Science Inventory. AA/ORD Paul Gilman spoke to the Board on the SI's role on capturing the effectiveness and use of science at the June 3-4 Board meeting. Smith wanted to know about the utility of products coming out of ORD, which the SI is supposed to capture. He'd like to know more about it and how it fits with the MYPs. Erickson thinks someone can do this.

McFarland asked for a clarification of the roles of ORD's Office of Science Policy and the Science Policy Council. Erickson responded that ORD's Office of Science Policy plan, organize, and guide research programs in EPA. While the labs and Centers have a lot of autonomy, OSP writes guidance on the MYPs, oversees the planning process. There is a part of OSP which does program support, organizing participation of ORD with program offices, for example if there is a technical basis for a rule. The Science Policy Council is an intra-Agency, cross-office body of fairly senior people who address the interface of science and policy. McFarland asked if ORD has representation on SPC (it does).

Lifset is interested in understanding the interface between the Pollution Prevention Plan (and its sequel) and these two plans. He's not sure what level of information he wants besides the old MYP, but it might be interesting to go into this a little bit at the meeting. We could put in a placeholder for P2 and perhaps add Alan Hecht on Sustainability. The sustainability research strategy is the umbrella to which various MYPs will contribute. The plan formerly known as P2 is one of these plans.

The DFO asked if there is anything else under that umbrella or anything else that touches the CS & RCRA MYPs that we should consider? Erickson knows the range of plans and what's in them. Maybe we've covered it sufficiently.

At 4:15 McFarland asked if the Panel had any other requests. The Panel's



questions define the quality of response the Panel can give. This is the opportunity to probe the Agency further if that is necessary. There were no additional questions.

At 4:20 the Panel considered the draft July 7-9 agenda, which will change significantly based on today's discussions. There will be a lot of writing at this meeting. The DFO mentioned the importance of the out briefing for Agency managers on Friday afternoon. This is an important interaction and a time when the Panel needs to put best foot forward. John Smith suggested that the DFO send out a note to the Panel explaining why it is important for people to stay and participate in the out briefing. Dave Dzombak said that, to the extent they have additional briefings on topics such as the SI and pollution prevention, they should not be on the first day. It would be better to use their energies on writing and have the additional briefings on the afternoon of the second day. Panel is willing to have working even prefers working lunches, but they need a slot somewhere where they can return phone calls.

McFarland asked if there were any public comment. There wasn't.

The meeting ended at 4:30 with thanks to the Agency.

Notes: On the June 10 conference call, Bob Olexsey informed the Panel that Administrator Leavitt's relevant priorities are recycling and renewing polluted land. He also said that OSWER priorities are Resource Conservation Challenge, the One Program Initiative, and Revitalization of contaminated land. This was inadvertently omitted from the minutes of that meeting.

The minutes of the June 17 conference call failed to identify panelist Tim Thompson as present. He was present, but joined after roll was called.

Respectfully Submitted:

Certified as True:

/s/  
Ms. Kathleen White  
Designated Federal Official  
Environmental Engineering Committee

/s/  
Dr. Michael J. McFarland, Chair  
CS & RCRA MYP Advisory Panel

**Attachments** (paper)

1. Federal Register Notice
2. Agenda for the meeting
3. Committee roster
4. Charge
5. Slides
6. email approving minutes with minor edits to be added